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| EXAMINER |
|---|
| CHOY, PAN G |

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

|  | Application No. | Applicant(s) |
| --- | --- | --- |
|  | 10/547,666 | LATVALA ET AL. |
| **Office Action Summary** | Examiner | Art Unit |  |
|  | PAN CHOY | 3624 |  |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1) ☒ Responsive to communication(s) filed on <u>02 September 2005</u>.
2a) ☐ This action is **FINAL**.                2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4) ☒ Claim(s) <u>1-42</u> is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) <u>1-42</u> is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

## Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on <u>02 September 2005</u> is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a) ☒ All    b) ☐ Some * c) ☐ None of:
        1. ☒ Certified copies of the priority documents have been received.
        2. ☐ Certified copies of the priority documents have been received in Application No. _____.
        3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)
1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date <u>2 December 2005</u>.
4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____ .

## DETAILED ACTION

### *Introduction*

1.     The following is a non-final office action in response to Applicant's submission

filed on September 2, 2005.

Currently claims 1-42 are pending. Claims 1, 25 and 42 are the independent

claims.

### *Information Disclosure Statement*

2.     The examiner has reviewed the patents and articles supplied in the Information

Disclosure Statements (IDS) provided on December 2, 2005.

### *Priority*

3.     Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C.

119(a)-(d).   The certified copy has been filed in parent Application No.: EP 03396018.8,

filed on March 6, 2003; and PCT No.: PCT/FI04/00123, filed on March 5, 2004.

### *Claim Rejections - 35 USC § 112*

4.     The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly
claiming the subject matter which the applicant regards as his invention.

**Claims 6-11, 13, 15-24, and 25-42** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

**Claims 6-11, 13, 15-24, and 27- 42** are rejected as being of improper multiple dependent form (see 37 CFR 1.75(c)).  Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.  Claims 6-11, 13, 15-24, and 27- 42 recite "according to any claims xx-yy" and "according to claims xx-yy" are improper because it renders claims to dependent on the multiple dependent claims.  For the purpose of examination, all multiple dependent claims will be considered as single dependent claims.

**Furthermore,** Claim 42 recites "A computer software product" performs "the steps according to any of claims 1-24" is improper because claiming for a computer software product is independently from a method claim, and therefor all steps to be performed under the independent claim must be recited within the claim.

**Regarding Claims 25-42,** Applicants assert that the claims 25-42 are means (or step) plus function limitations that invoke 35 U.S.C. 112, sixth paragraph. However, it is unclear to the Examiner whether the claim elements are means (or step) plus function limitations that invoke 35 U.S.C. 112, sixth paragraph, because the means (or step) plus function found in the specification does not pass the $3^{rd}$ step of the three-prong test.

In order to successfully invoke 35 U.S.C. 112, sixth paragraph, a three-prong test must be met (MPEP § 2181.I): (1) the claim must use means-plus-function language;

(2) the claim itself must not provided structural limitations to the means-plus-function language; and (3) the specification must recite explicit physical structural limitations for the means-plus-function language in the claim.

If applicants wish to have the claim limitation treated under 35 U.S.C. 112, sixth paragraph, applicants are required to:

(a) Amend the claim to include the phrase "means for" or "step for" in accordance with these guidelines:  the phrase "means for" or "step for" must be modified by functional language and the phrase must **not** be modified by sufficient structure, material, or acts for performing the claimed function; or

(b) Show that the claim limitation is written as a function to be performed and the claim does **not** recite sufficient structure, material, or acts for performing the claimed function which would preclude application of 35 U.S.C. 112, sixth paragraph. For more information, see MPEP § 2181.

If applicant does **not** wish to have the claim limitation treated under 35 U.S.C. 112, sixth paragraph, applicant is required to amend the claim so that it will clearly not be a means (or step) plus function limitation (e.g., deleting the phrase "means for" or "step for").

**Furthermore,** claims 25, and 26-41 recite "means for setting rating" and "means according" render the claims indefinite because it is unclear to the examiner as to what invention do Applicants intended to claim (i.e., not a process, apparatus or system). Applicants are required to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

## *Claim Rejections - 35 USC § 101*

5.      35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or
composition of matter, or any new and useful improvement thereof, may obtain a patent therefor,
subject to the conditions and requirements of this title.

**Claims 1-24** are rejected under 35 U.S.C. 101 because the claimed invention is

directed to non-statutory subject matter. Based on Supreme Court precedent, to be

patent eligible under 35 U.S.C. 101 a method/process claim must (1) be tied to a

particular machine or apparatus or (2) transform a particular article into a different state

or thing (see at least Gottschalk v. Benson, 409 U.S. 70 (1972); Diamond v. Diehr, 450

U.S. 192 (1981); Parker v. Flook, 437 U.S. 589 n.9 (1978); and Cochrane v. Deener, 94

U.S. 780, 788 (1876)). Furthermore, the Supreme Court held that the use of a particular

machine or transformation of an article must impose meaningful limits on the claim's

scope to impart patentability (Benson, 409 U.S. 71-72). The involvement of the

machine or transformation must not merely be insignificant extra-solution activity (Flook,

437 U.S. 590). Also see In re Bilski, No. 2007-1130, _F.3d_, 2008 WL4757. If neither

of these requirements is met by the claim, the method is not a patent eligible process

under § 101. In the present case, claim 1 recites a method including the steps is

directed to software/data per se and is non-statutory subject matter. Note that the tie to

another statutory class should be in the body of the claim, such as receiving or

collecting an event record containing event data on an event <u>via a computer</u>.

**Claims 25-41** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 25 recites "Means for setting rating" does not fall within at least one of the four categories of patent eligible subject matter recited in 35 U.S.C. 101 (process, machine, manufacture, or composition of matter), Examiner interpreted claim 25 to be an apparatus for the purposes of examination. However, under the current guidelines of 35 USC 101, computer software must be tangibly **embodied on a computer readable medium, and, when executed by a computer processor**, perform the steps of the software. In their broadest reasonable interpretation and in light of the specification, claims 25-41, as recited, can be interpreted to be embodied on abstract mediums such as carrier waves and signals, and therefore not eligible for patent protection. Accordingly, claim 25-41 are not eligible for patent protection.

**Claim 42** is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Software, programming, instructions or code not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in a computer. When such descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases.

Furthermore, software, programming, instructions or code not claimed as being computer executable are not statutory because they are not capable of causing

functional change in a computer. In contrast, when a claimed computer-readable

medium encoded with a computer program defines structural and functional

interrelationships between the computer and the program, and the computer is capable

of executing the program, allowing the program's functionality to be realized, the

program will be statutory.

In the present case, claim 42, as recited, can be interpreted to be embodied on

abstract mediums such as carrier waves and signals, and therefore not eligible for

patent protection. Accordingly, claim 42 is not eligible for patent protection.

## *Claim Rejections - 35 USC § 103*

6.      The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as
> set forth in section 102 of this title, if the differences between the subject matter sought to be
> patented and the prior art are such that the subject matter as a whole would have been obvious
> at the time the invention was made to a person having ordinary skill in the art to which said
> subject matter pertains. Patentability shall not be negatived by the manner in which the invention
> was made.

**Claims 1-42** are rejected under 35 U.S.C. 103(a) as being unpatentable over

Farhat et al., (Hereinafter: "Farhat"), (U.S. Pub. No.: 2001/0034704 A1), and in view of

Allison et al., (Hereinafter: "Allison"), (U.S. Pat. No.: 6052450).

**Regarding Claim 1**, Farhat teaches a method for setting rating, including

identifying at least two roles relating to the event (see ¶ 74: *identifying parties*

*involved in a service access transaction*; and ¶ 2: *service access transactions in a*

*multi-party environment, involving multiple service providers and multiple service*

*customers, such as a roaming service access environment*),

producing a copy of the event record for each of said identified roles (see ¶ 66:

*generate bills to customers and make payments to service providers*), and

rating each of said produced copies according to a rating process specific to the

role (see ¶ 133: *a usage rate is selected form a rate usage table of the pricing table*),

wherein the step of rating includes for at least one of said copies:

identifying at least two different rating processes relating to the event (see

¶ 129: a buy rate and a sell rate; and Fig. 12: select buy rate from Buy_rate table,

and compute the sell rates),

producing a copy of the event record for each of said identified rating

processes (see ¶ 74: *defining the price that the access broker system owes to a*

*service provider and the price that a customer owes to the access broker system;*

*and ¶ 67: generates bills and distributes them among customers and makes*

*payments to the remote ISPs or other service providers*); and

rating each of said produced copies according to the identified rating

process (see ¶ 133: *usage rate is selected form a rate usage table of the pricing*

*tables based on a pricing plan identifier, a location group identifier, a transaction*

*date and total usage; and ¶ 85: generated for each of the consumers in the multi-*

*tiered consumer structure according to criteria and specifications unique to each*

*customer).*

Farhat does not specifically disclose receiving (101) or collecting (102) an event

record containing event data on an event; however, Allison discloses "receiving event

data from the communication network, the event data concerning network usage" (see

col. 1, lines 38-39). It would have been obvious to one of ordinary skill in the art at the

time of the invention to include the features as taught by Allison in the system of

Farhat, since the claimed invention is merely a combination of old elements, and in the

combination each element merely would have performed the same function as it did

separately, and one of ordinary skill in the art would have recognized that the results of

the combination were predictable.

**Regarding Claim 2**, Farhat teaches wherein in said at least one role-specific

process, said step of identifying at least two different rating processes comprises:

identifying at least two different contracts relating to the event (see Fig. 11, item

228: select a contract and pricing plan; and ¶ 5: *The roaming user is a subscriber to an*

*ISP, but through an agreement between the first ISP and the second ISP to obtains*

*service access through the POP),* and

identifying a contract-specific rating process for each of said identified contracts

(see ¶ 67: *generates bills and distributes them among customers and makes payments*

*to the remote ISPs or other service providers; and ¶ 133: based on a pricing plan*

*identifier, a location group identifier, a transaction date and total usage).*

**Regarding Claim 3**, Farhat teaches wherein in said at least one role-specific

process, said step of identifying at least two different rating processes comprises:

identifying at least two different products relating to the event (see ¶ 128: *the*

*product is determined based on the type of transaction, for example, roaming,*

*telephony, and e-commerce*), and

identifying a product-specific rating process for each of said identified products

(see ¶¶ 77-84: the settlement system includes the flexible pricing engine that supports

a flexible pricing model, such as based on the type of service access (e.g. dialup

modem, ISDN, DSL), or a flat pricing for all usage).

**Regarding Claim 4**, Farhat teaches wherein in said at least one role-specific

process, said step of identifying at least two different rating processes comprises:

identifying at least two different products and at least two different contracts

relating to the event (see ¶ 128: *a contract and pricing plan are selected from a*

*contract table based on a customer identifier, a location identifier, a reseller identifier*

*and a production identifier*), and

identifying a specific rating process for each combination of a product and a

contract, wherein the product and the contract are selected from the group of said

identified products and said identified contracts (see ¶ 79: *Any combination of (a)*

*usage (e.g. a function of rate and session length); (b) by transaction; and (c) flat*

*pricing*).

**Regarding Claim 5**, Farhat teaches wherein at least one of the identified products is a product package comprising at least two product components, and the identified rating process includes:

producing a copy of the event record for each of said at least two product components (see Fig. 20: service report with different transactions; and see ¶ 128: *the product is determined based on the type of transaction, for example, roaming, telephony, and e-commerce)*,

identifying a specific rating process for each of said at least two product components (see ¶¶ 77-84: the settlement system includes the flexible pricing engine that supports a flexible pricing model, such as based on the type of service access (e.g. dialup modem, ISDN, DSL), or a flat pricing for all usage, and

rating each of said produced copies according to the respective one of said specific rating processes (see ¶ 133: *rate is selected form a rate usage table of the pricing tables based on a pricing plan identifier, a location group identifier, a transaction date and total usage).*

**Regarding Claim 6**, Farhat teaches wherein the step of identifying at least two roles relating to the event includes identifying at least two parties relating to the event and identifying at least one role for each of said identified parties (see ¶ 74: *identifying parties involved in a service access transaction*; and ¶ 2: *service access transactions in a multi-party environment, involving multiple service providers and multiple service customers, such as a roaming service access environment).*

**Regarding Claim 7**, Farhat teaches wherein the rating of each of the produced

copies is performed independently of the rating of the other copies (see Fig. 18: billing

statement for an individual is performed independently from the others).

**Regarding Claim 8**, Farhat teaches wherein the steps of producing copies of the

event records comprise supplementing said copies with rating parameters for the rating

process (see ¶ 73: a billing application that closes an accounting cycle, applies

periodical fees, generates billing reports, including invoices and call detail records, and

publishes billing reports to the web).

**Regarding Claim 9**, Farhat teaches wherein the steps of producing copies of the

event records comprise removing unnecessary data from said copies (see ¶ 138: the

computed sell rate may be rounded to the nearest cent; and ¶ 217: detects and

removes duplicates from the loaded records, change the status of the duplicate raw

CDR records to "duplicate").

**Regarding Claim 10**, Farhat teaches wherein each step of rating includes

adding the rate information in the rated copy (see ¶ 138: a sell rate may be computed

by adding the discounted usage and transaction rates).

**Regarding Claim 11**, Farhat disclose comprising the steps of: in the each step of

producing copies of the event record, retaining the key in each of said produced copies

(see Fig. 18: Account number and reference number).

Farhat does not specifically disclose adding a key to each of the received (101) or collected (102) event records; however, Farhat discloses customer_ID (see Fig. 13A), and "where the accounting records are stored in the database, and further processed by the settlement system to produce Call Detail Records, each call detail record provides detailed usage regarding the identity of the roaming user" (see ¶ 165). It would have been obvious to one of ordinary skill in the art at the time of the invention to include an account number (Fig. 18) as the key in the record regarding the identity of the roaming user in the system of Farhat, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

Farhat does not specifically disclose storing an original copy of the event record, which contains the key, to a database; however, Farhat discloses "retrieve raw Call Detail (or accounting) Records from the raw Call Detail Records Table in the database maintained by the transaction server" (see ¶ 108). It would have been obvious to one of ordinary skill in the art at the time of the invention to include a database table storing the raw (original) call detail records, which contains an account number (Fig. 18) as the key in the system of Farhat, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

**Regarding Claim 12**, Farhat teaches the method according to claim 11,

comprising a correction process for correcting an erroneously rated copy of an event

record, which correction process comprises the steps of:

extracting the key from the erroneously rated copy (see ¶ 126: extract a domain

name, then validated against a customer_domain table, which results in a

customer_ID),

correcting, if necessary, parameters used in the identified rating process (see ¶

148: if an account_cycle record does not exist for a given customer_ID, reseller_ID,

and product_ID, such a record is then created within the account cycle table),

retrieving from the database a copy of the original copy containing the extracted

key (see Fig. 13A, retrieve account_cycle record for a given consumer_ID),

producing a negative copy of an erroneously rated copy for canceling the

erroneously rated copy (Fig. 13A: create account_cycle records for a given

consumer_ID), and

performing the identified rating process to the retrieved copy (see Fig. 13B,

retrieve contract and pricing plan).

Farhat does not specifically disclose identifying the rating process used to rate

the erroneously rated copy, wherein said identifying includes, where applicable,

identifying the role, product and/or contract according to which the erroneously rated

copy was rated; however, Allison discloses "Each PEL is a subset of the events on the

MEL together with the information on how the events have been processed in the PAE,

Thus the PEL has a processing audit which should an error occur in the billing process

allow the origin of the error to be determined" (see col. 4, lines 59-64). It would have

been obvious to one of ordinary skill in the art at the time of the invention to include the

features as taught by Allison in the system of Farhat, since the claimed invention is

merely a combination of old elements, and in the combination each element merely

would have performed the same function as it did separately, and one of ordinary skill

in the art would have recognized that the results of the combination were predictable.

     **Regarding Claim 13**, Farhat further teaches the method comprising the steps of:

creating (302) rated internal event formats from the event data (see ¶ 74: The

normalization function includes converting accounting data receiving from multiple

transaction servers into a single format Call Detail Records to be using for billing),

     providing at least two entities with individual sets of rating parameters (see ¶ 66:

provide accounting records to the settlement system to generate bills; ¶ 204: the

parties involved in a service access transaction (a customer and a provider),

     providing the said at least two entities with individual configuration interfaces,

through which the individual set of rating parameters for each entity is arranged to be

modified (see ¶ 75: the settlement system operates to provide near real-time

settlement of service access transactions to allow account tracking by both providers

and customers),

     in response to the event data, executing the rating process of the internal event

formats on the basis of the individual sets of rating parameters (see ¶ 229: a computer

system with a set of instructions, for causing the machine to perform any one of the

methodologies), and

correlating an individual internal event format for at least two entities from the

individual event data, on the basis of the individual sets of rating parameters (see ¶ 74:

defining the price that the access broker system owes to a provide and the price that

the customer owes to the access broker system for a particular service access

transaction).

**Regarding Claim 14**, Farhat further teaches the method according to claim 13,

characterized in that the event data's reception or collection process control rules and

parameters are received from the directions of various entities through a configuration

interface connected to each direction, and the event data's reception or collection

processes are controlled centrally in response to the control rules and parameters (see

¶ 204: accounting data received from the various providers into a single format to be

use for billing; and ¶ 46: the settlement system interface directly with the central

settlement database).

**Regarding Claim 15**, Farhat further teaches the method characterized in that the

control rules and parameters of the internal event formats delivery process or of the

delivery process of corresponding event data are received from the directions of

various entities through a configuration interface connected to each direction, and the

internal event formats' or event data's delivery processes are controlled centrally in

response to the control rules and parameters (¶ 46: the settlement system interface

directly with the central settlement database; and ¶ 69: the web server operates to

generate and deliver web pages to both the remote internal user and the customers).

**Regarding Claim 16**, Farhat further teaches the method characterized in that, in

the method, the linking of internal event format allocations to the operative systems is

executed (302) through interface files (see ¶ 70: The settlement system and a

collection of internal users are reside behind a firewall, the settlement system is hosted

on one or more server machines that have access to a central database).

**Regarding Claim 17**, Farhat further teaches the method characterized by

running each of the identified rating processes in the same batch run (see ¶ 103: A

provider loader receives call detail records from providers in a batch form).

**Regarding Claim 18**, Farhat further teaches the method characterized in that the

method is run for a multi-company system in a service-center (see ¶ 210: the

respective loader thread retrieves the raw data form the remote locations, and loads

the retrieved data into a transaction history table).

**Regarding Claim 19**, Farhat further teaches the method characterized in that an

extranet user interface is set for customer companies for viewing and/or entering

internal event formats for rating, and/or for initiating processes (see ¶ 224: the billing

statement is generated by the settlement system, and that may be accessed on-line by

a service provide or customer to view the current state of an account balance).

**Regarding Claim 20**, Farhat further teaches the method characterized in that the

rules are collected to form sets of parameters in a centralized data system and the

rating process is controlled and defined with the aid of the parameter set (see Fig. 12,

item 244, and ¶ 133: The total usage parameter may only be used where usage-based

rating conditions are included within a rate).

**Regarding Claim 21**, Farhat further teaches the method characterized in that

each of the set of rating parameters set by the said individual entities controls the

common multi-company environment (see ¶ 99: by various functional units, the data

management application may provide various user interfaces to manage information

related to customers and access points, and to perform accounting and administrative

functions).

**Regarding Claim 22**, Farhat further teaches the method characterized in that the

received event data is allocated to the control rules and parameters of at least one

individual set of rating parameters and at least one independent event for rating is

created from the event data, on the basis of identified party roles, contracts, and/or

products (see ¶ 223: the contract screen allowing input information, and provides

pricing management functionality by facilitating access to contract, pricing, and buy

rate and sell rate data).

**Regarding Claim 23**, Farhat further teaches the method characterized in that the

correction process for a rated event uses a method according to any of claims 13-22 as

such according to individual control rules and parameters, so that after correction of the

erroneous parameters of the company, i.e. entity, the rating process is re-run in

response to the corrected parameters (see ¶ 223: an adjustment processing screen for facilitating Call Detail Records and invoice adjustments).

**Regarding Claim 24**, Farhat further teaches the method characterized in that in response to a configuration change in the set of rating parameters, the rating of the already completed multi-company environment totality is changed afterwards substantially in real time (see ¶ 86: when a accumulated usage or transaction total for a particular reseller, which may provide access to any number of further levels of customer, reaches a predetermined threshold, the price applied for service access may change), and

Farhat does not specifically disclose each event is re-assembled on the basis of the parameters and control rules, which form from the viewpoint of the individual entity examined at the time; however, Allison discloses "the CBP 4 takes the priced call records files generated by the SDPs and assembles the information into a single data file" (see col. 4, lines 18-20). It would have been obvious to one of ordinary skill in the art at the time of the invention to include the features as taught by Allison in the system of Farhat, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

**Regarding Claim 25**, Farhat further teaches setting rating, which include

means for providing individual sets of rating parameters to at least two entities

(see ¶ 133: a usage rate is selected from a rate usage table of the pricing table based

on a pricing plan identifier, a location group identifier, a transaction date and total

usage) for controlling and defining the rating process, and for collecting the sets of

rating parameters in a centralized database,

means for providing individual configuration interfaces to at least two entities,

through the interfaces of which the individual set of rating parameters for each entity is

adapted to be modified (see Fig. 17: interface for parameters setting),

means for adding a key to each event to be rated (see ¶ 138: *a sell rate may be

computed by adding the discounted usage and transaction rates*), in order to make

each event an individualized original event that represents exactly one event type, for

which a rating process is defined in the set of rating parameters (see ¶¶ 143-147: two

sets of rates may be applied),

means for executing the internal event format's rating process in response to the

event data (see ¶ 229: a computer system with a set of instructions, for causing the

machine to perform any one of the methodologies), on the basis of the individual set of

rating parameters, comprising:

means for receiving at least one set of original event data (see Fig. 9: Raw call

detail record table; and ¶ 108: retrieve raw call detail records from each of the

respective databases),

means for providing copies of the event data for at least every party role-,

contract-, and product-specific party that relate to the event, and means for rating each

party copy (see ¶ 66: *generate bills to customers and make payments to service*

*providers*),

means for creating rated internal event formats from the event data (see ¶ 74:

The normalization function includes converting accounting data receiving from multiple

transaction servers into a single format Call Detail Records to be using for billing), and

Farhat does not specifically disclose assembling an individual internal event

format for at least two entities from individual event data, on the basis of an individual

set of rating parameters; and  receiving or collecting event data; however, Allison

discloses "the CBP 4 takes the priced call records files generated by the SDPs and

assembles the information into a single data file" (see col. 4, lines 18-20); and

"receiving event data from the communication network, the event data concerning

network usage" (see col. 1, lines 38-39).  It would have been obvious to one of ordinary

skill in the art at the time of the invention to include the features as taught by Allison in

the system of Farhat, since the claimed invention is merely a combination of old

elements, and in the combination each element merely would have performed the

same function as it did separately, and one of ordinary skill in the art would have

recognized that the results of the combination were predictable.

**Regarding Claim 26**, Farhat further teaches characterized in that they include

means for receiving control rules and parameters of the event-data reception or

collection process from the directions of various entities through a configuration

interface relating to each direction (see ¶ 204: accounting data received from the

various providers into a single format to be use for billing; and ¶ 46: the settlement

system interface directly with the central settlement database), and

means for centrally controlling the reception or collection processes for event

data in response to the control rules and parameters (see ¶ 73: The back-end

application includes a settlement application, a billing application, and an auditing

application that verifies business rules and structural integrity of the central database).

**Regarding Claim 27**, Farhat further teaches characterized in that they include

means for receiving the control rules and parameters of the event-description

delivery process, or of a corresponding event-data delivery process from the directions

of various entities through a configuration interface relating to each direction (see ¶ 69:

the web server operates to generate and deliver web pages to both the remote internal

user and the customers), and

means for controlling the delivery process of internal event formats, or of event

data centrally, in response to the control rules and parameters (see ¶ 46: the

settlement system interface directly with the central settlement database).

**Regarding Claim 28**, Farhat further teaches characterized in that they include

means for executing a link of the event-description allocations to the operative

system through interface files (see ¶ 102: the system interfaces have a loader

application that includes a transaction server loader, multiple transaction server loaders

may be implemented as distributed database links, and the accounting records are

pulled via the loader in near real-time).

**Regarding Claim 29**, Farhat further teaches characterized in that they include

means for performing party-role-specific processes, which processes extend

outside a roaming settlement (see ¶ 2: the brokering and settlement of service access

transactions in a multi-party environment, involving multiple services providers and

multiple service customers, such as a roaming service access environment) .

**Regarding Claim 30**, Farhat further teaches characterized in that they include

means for performing discount calculation (see ¶ 138: a sell rate may be computed by

adding the discounted usage and transaction rates).

**Regarding Claim 31**, Farhat further teaches characterized in that they include

means for running a multi-company system, which multi-company system is

arranged for service-center operation (see ¶ 85: the multi-tiered customer structure is

purely exemplary, and any combination and arrangement of customer structure may be

accommodated by the flexible pricing model).

**Regarding Claim 31**, Farhat further teaches characterized in that they include

means for setting an extranet interface for customer companies for viewing

and/or entering their own rated events and/or for initiating processes (see ¶ 69: the

web server operates to generate and deliver web pages to both the remote internal

user and customers) .

**Regarding Claim 33**, Farhat further teaches characterized in that they include

means for assembling rules to form set of parameters in a centralized data

system and means for controlling and defining the rating process with the aid of the set

of parameters (see ¶ 127: the specific business rules are defined to determine the

location type for a given call detail record; and ¶ 73: an auditing application that verifies

business rules and structural integrity of the central database).

**Regarding Claim 34**, Farhat further teaches characterized in that they include

means controlling a common multi-company environment for the sets of rating

parameters set by each of the said individual entities (see ¶ 201: a certificate

management process manages certificates for the network servers and the roaming

servers installed at various remote sites).

**Regarding Claim 35**, Farhat further teaches characterized in that they include

means for updating an individual possibly customer-specific set of rating

parameters from an operative and/or external system (see ¶ 69: the phonebook server

operates to maintain and update the electronic phonebooks of customers, and

accordingly both receives and publishes updates to and from service providers).

**Regarding Claim 36**, Farhat further teaches characterized in that they include

means for receiving event data in possibly different formats from different sources and

means for creating internal event formats from them (see ¶ 74: The normalization

function includes converting accounting data receiving from multiple transaction

servers into a single format Call Detail Records to be using for billing).

**Regarding Claim 37**, Farhat further teaches characterized in that they include

means for allocating received event data to the control rules and parameters

belonging to at least one individual set of rating parameters and means for creating

from the event data at least one independent event to be rated, on the basis of

identified party-roles, contracts, and/or products (see ¶ 223: the contract screen

allowing input information, and provides pricing management functionality by facilitating

access to contract, pricing, and buy rate and sell rate data).

**Regarding Claim 38**, Farhat further teaches characterized in that they include

means for using a rated-event correction process according to any of claims 25-

37 as such according to the individual control rules and parameters, in such a way that

they include means for re-running the rating process after correcting erroneous

parameters of a company, i.e. entity, in response to the corrected parameters (see ¶

223: an adjustment processing screen for facilitating Call Detail Records and invoice

adjustments).

**Regarding Claim 39**, Farhat further teaches characterized in that they include

means for afterwards amending, essentially in real time, an already completed

rating of the multi-company environment totality, in response to a configuration change

in the set of rating parameters (see ¶ 86: when a accumulated usage or transaction

total for a particular reseller, which may provide access to any number of further levels

of customer, reaches a predetermined threshold, the price applied for service access

may change), and

Farhat does not specifically disclose re-assembling each internal event format on

the basis of the parameters and control rules, which form the event from the viewpoint

of the individual entity being examined at the time; however, Allison discloses "the CBP

4 takes the priced call records files generated by the SDPs and assembles the

information into a single data file" (see col. 4, lines 18-20). It would have been obvious

to one of ordinary skill in the art at the time of the invention to include the features as

taught by Allison in the system of Farhat, since the claimed invention is merely a

combination of old elements, and in the combination each element merely would have

performed the same function as it did separately, and one of ordinary skill in the art

would have recognized that the results of the combination were predictable.

**Regarding Claim 40**, Farhat further teaches characterized in that they include

means for defining the rate of at least one product according to the event data and the

discounts possibly related to it according to the control rules and parameters relating to

at least one individual set of rating parameters (see ¶ 74: defining the price to the

service provide and the customer for a particular service access transaction; and ¶ 86:

specifically, volume discounts based on usage or transaction total may apply).

**Regarding Claim 41**, Farhat further teaches characterized in that they include

means for delivering an internal event format to an external system and for storing it in

a data store, according to the control rules and parameters relating to at least one

individual set of rating parameters (see ¶ 69: the web server operates to generate and

deliver web pages to both the remote internal user and the customers).

**Regarding Claim 42**, claim 42, a computer software product for setting rating,

recites similar limitations to Claim 1 and is therefore rejected using the same art and

rationale as applied in the reject of Claim 1.

*Conclusion*

7.      The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

- Ye et al., (U.S. Pat. No.: 7233918) discloses a system and method rating

  billing events in real time according to account usage information.

- Scolini et al., (U.S. Pub. No.: 2003/0233321) discloses a system and method

  for web-based, convergent communications billing solution, create the

  integrated bills, process payments and adjustments and provide the required

  reports to the customers and multiple carriers participating.

- "Billing System Market Reaps Huge Growth", Tim Wilson, Phillips Business

  Information's Internet Week, Potomac, Jan 5, 1998. Discloses how telecom

  carriers handle phone bills.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to PAN CHOY whose telephone number is (571)270-7038.

The examiner can normally be reached on 4/5/9.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Bradley Bayat can be reached on (571)272-6704. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

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system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


/PAN G CHOY/
Examiner, Art Unit 3624
May 4, 2009


/Scott L Jarrett/
Primary Examiner, Art Unit 3624